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MARKETING SPREADS FOR DAIRY PRODUCTS

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MARKETING SPREADS FOR DAIRY PRODUCTS 1/

Retail prices and farm-retail spreads for the principal dairy products changed little from 1963 to 1964. The farm values of these products increased slightly. 2/ Prices and farm-retail spreads for these products have been relatively stable in recent years.

Fresh Milk

Prices of milk sold in retail stores in U.S. urban areas averaged 47.7 cents per half gallon in 1964, 0.1 cent more than in 1963 (table 8). Prices of milk delivered to homes rose to 52.8 cents per half gallon from 52.4 in 1963. The farm value, which is the same for milk sold in both ways, averaged 21.7 cents last year, 0.2 cent more than in 1963. Thus, the farm-retail spread decreased 0.1 cent for store milk but increased 0.2 cent for home delivered milk.

Numerous changes occurred during the 1954-64 period. The farm value varied from 20.9 cents in 1955 to 22.1 cents in 1957, 1960, and 1961. In recent years it has averaged a little higher than in the mid-1950's. Until 1962, however, decreases in the farm value were not accompanied by reductions in retail prices. In that year, prices of both retail store and home-delivered milk declined along with the farm value. Both retail prices and the farm value again declined slightly in 1963. In 1961, the prices of store milk declined 0.1 cent, although the farm value did not change. This was the first decrease in the annual average retail prices of milk during 1954-64.

The annual average farm-retail spread for fresh milk sold in retail stores increased each year from 1954 to 1961; for milk delivered to homes, it increased until 1963, when it did not change. From 1954 to 1964, the farm-retail spread increased 19 percent for retail-store milk and 22 percent for home-delivered milk.

Various factors contributed to the greater increase in the retail price and marketing spread for home-delivered milk than for milk sold in retail stores. One factor is that a higher degree of competition frequently exists among milk distributors for sales to retail stores than for sales directly to consumers. Stores are better informed about alternative sources of supply than are home-delivery customers. Hence, competitive discounts to stores from list prices for milk are common. Increased sales per store have brought economies of scale. In some markets, changes in distribution practices have brought about reductions in costs of delivering milk to stores. There have been fewer cost-reducing charges in delivering milk to homes than in store distribution. The volume of milk delivered to homes has declined, but overhead has not declined proportionately.

Milk distributors' costs.--Operating cost for a group of 70 firms distributing fresh milk increased to $4.71 per 100 pounds of milk and cream processed in 1964 (average for first half of year) from $4.35 in 1954 (figure 1). 3/ Two-thirds of this increase resulted from rises in salaries, wages, and commissions--costs that accounted for about half of total operating costs in each year. Several other expense items, however, increased

1/ Prepared by Alois F. Wolf, agricultural economist, Marketing Economics Division, Economic Research Service, USDA.

2/ The farm value is the return to farmers for the farm products equivalent to the product sold at retail. The farm-retail spread is the difference between the farm value and the retail price. It is the total charge made by the marketing firms for assembling raw products and processing, transporting, and distributing dairy products.

3/ All data for 1964 are preliminary estimates based on data for first half of the year.

Table 8.--Milk, fresh: Retail price, farm value, farm-retail spread, and farmer's share of retail price, 1954-64

Year	Retail price per ½ gallon		Farm value 1/	Farm-retail spread		Farmer's share	
	Home delivered	Sold in retail stores		Home delivered	Sold in retail stores	Home delivered	Sold in retail stores
	Cents	Cents	Cents	Cents	Cents	Percent	Percent
1954	46.4	42.9	21.0	25.4	21.9	45	49
1955	46.6	42.9	20.9	25.7	22.0	45	49
1956	48.9	44.3	21.6	27.3	22.7	44	49
1957	50.4	45.9	22.1	28.3	23.8	44	48
1958	51.0	46.7	21.8	29.2	24.9	43	47
1959	51.1	47.2	21.8	29.3	25.4	43	46
1960	52.4	48.3	22.1	30.3	26.2	42	46
1961	52.9	48.2	22.1	30.8	26.1	42	46
1962	52.6	47.8	21.7	30.9	26.1	41	45
1963	52.4	47.6	21.5	30.9	26.1	41	45
1964 2/	52.8	47.7	21.7	31.1	26.0	41	45

1/ Payment to farmer for 4.39 pounds of Class I milk.
2/ Preliminary.

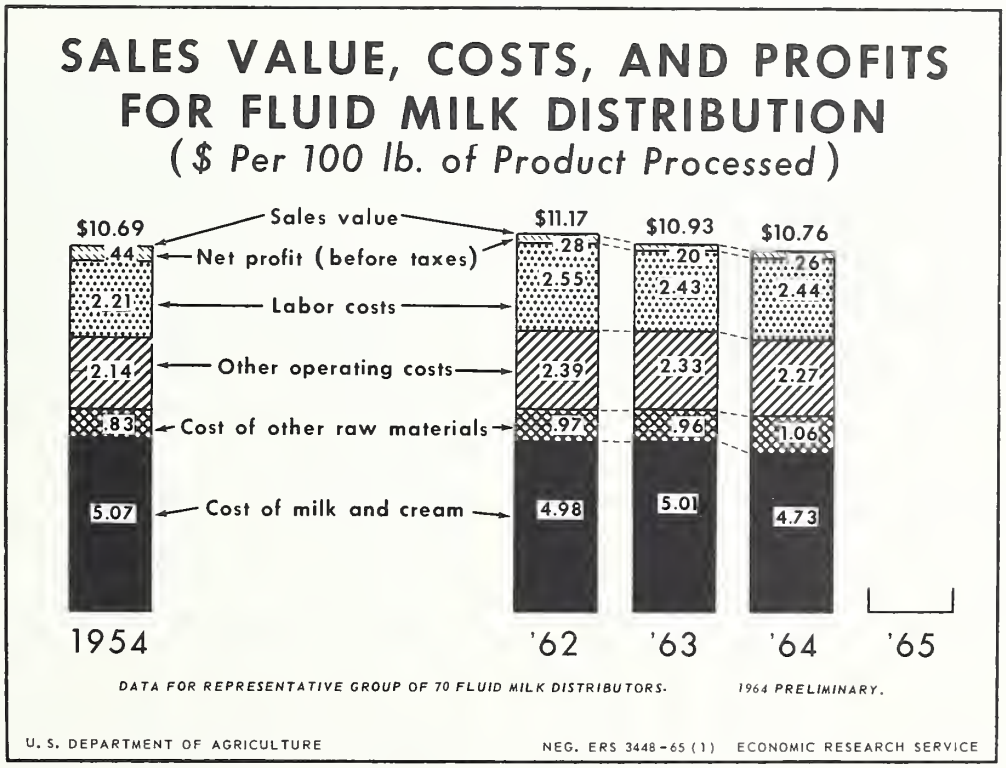

Figure 1

by a larger percentage than payroll costs. Costs of insurance were up 67 percent. The total cost of repairs, rent and depreciation was up 16 percent. Costs of containers, the second most important cost item, rose 8 percent per 100 pounds of milk and cream processed.

Raw material costs of these firms decreased to $5.79 per 100 pounds of milk and cream processed in 1964 from $5.90 in 1954, partially offsetting the increase in operating costs. Costs increased more than receipts, however, so net profits declined per 100 pounds of milk and cream processed.

American Processed Cheese

Retail prices of American processed cheese averaged a record 63.8 cents per pound in 1964, up 0.7 cent (1 percent) from 1963 (table 9). The farm value increased 0.6 cent to 30.2 cents, so the farm-retail spread increased slightly. An increase of 0.4 cent in the wholesale-retail segment of the farm-retail spread was about offset by a decrease in the farm-wholesale segment.

The retail price of American processed cheese increased each year from 1954 to 1961. Since 1961, it has been relatively stable. It averaged about 7.8 cents (14 percent) higher in 1964 than in 1954. During the same period the farm value rose 2.4 cents and the farm-retail spread increased 5.4 cents. The farm-wholesale segment of the spread widened 2.9 cents (33 percent) and wholesale-retail segment, 2.5 cents (13 percent).

Retail prices of American processed cheese increased by a greater percentage than those of butter and evaporated milk (table 9). The greater increase may have resulted partly from strengthening demand for cheese. Per capita consumption of American cheese, including both that in natural and processed forms, (on a natural cheese weight basis) increased from 5.5 pounds in 1954 to 6.2 pounds in 1964, in contrast to decreases in per capita consumption of butter and evaporated milk. (Data for American processed cheese separately are not available.)

Butter

The retail price of butter averaged 74.4 cents per pound last year, 0.8 cent more than in 1963. The farm value increased 0.8 cent to 53.0 cents, so the farm-retail spread did not change. The farm-wholesale segment decreased, and the wholesale-retail segment increased.

During the 1954-64 period, the farm value of butter varied from 50.9 cents in 1955 to 54.5 cents in 1961. No upward or downward trend was evident. The farm-retail spread, however, trended upward and averaged 15 percent higher in 1962-64 than in 1954-56. This increase resulted entirely from a widening of the wholesale-retail segment; the farm-wholesale segment decreased substantially. These reductions probably resulted mainly from economies in processing. The retail price also averaged higher in the later years of the period than in the earlier years.

The farm value of butter increased by a much smaller percentage from 1954 to 1964 than the farm values of American cheese and evaporated milk, although prices farmers received for milk used in each of these products increased by about the same percentage. There are 2 reasons for the smaller increase in the farm value of butter: (1) The farm value of butter is a weighted average of the farm values of butter made from farm-separated milk and that made from creamery-separated milk. The proportion of butter made from farm-separated cream has decreased sharply during the past 25 years or so, but about one-sixth of the creamery butter produced in this country still is made from farm-separated milk. Prices received by farmers for cream averaged 58.8 cents per pound of butterfat in 1964, down 0.1 cent from the average for 1954. (2) More significantly, the imputed value of the fat component of milk, from which butter is made, did not increase by as large a percentage as the value of the nonfat

Table 9 .--Retail and wholesale prices of principal manufactured dairy products, farm values, marketing spreads, and farmer's share of retail prices, 1954-64

Year	Average retail price per pound	Processed loaf, wholesale price per pound, Chicago	Farm value of equivalent quantity of milk	Farm-retail spread: Total	Farm-retail spread: Wholesale-retail	Farm-retail spread: Farm-wholesale	Farmer's share
	American processed cheese						
	Cents	Cents	Cents	Cents	Cents	Cents	Percent
1954	56.0	36.5	27.8	28.2	19.5	8.7	50
1955	56.1	36.4	27.8	28.3	19.7	8.6	50
1956	56.3	36.3	28.6	27.7	20.0	7.7	51
1957	56.7	36.5	28.8	27.9	20.2	7.7	51
1958	57.1	36.0	28.2	28.9	21.1	7.8	49
1959	57.3	36.7	28.2	29.1	20.6	8.5	49
1960	59.6	39.6	29.8	29.8	20.0	9.8	50
1961	63.3	39.6	30.2	33.1	23.7	9.4	48
1962	62.9	38.4	29.0	33.9	24.5	9.4	46
1963	63.1	41.5	29.6	33.5	21.6	11.9	47
1964 1/	63.8	41.8	30.2	33.6	22.0	11.6	47
	Creamery Butter						
	Average retail price per pound	Wholesale price per pound, 92 score, Chicago	Farm value of equivalent quantity of milk and cream	Farm-retail spread: Total	Farm-retail spread: Wholesale-retail	Farm-retail spread: Farm-wholesale	Farmer's share
1954	71.1	59.7	52.2	18.9	11.4	7.5	73
1955	69.6	57.4	50.9	18.7	12.2	6.5	73
1956	70.8	59.2	52.7	18.1	11.6	6.5	74
1957	72.9	59.6	52.7	20.2	13.3	6.9	72
1958	72.9	58.7	52.0	20.9	14.2	6.7	71
1959	73.9	59.7	53.2	20.7	14.2	6.5	72
1960	73.5	59.1	53.4	20.1	14.4	5.7	73
1961	74.9	60.5	54.5	20.4	14.4	6.0	73
1962	73.8	58.6	52.4	21.4	15.2	6.2	71
1963	73.6	58.2	52.2	21.4	15.4	6.0	71
1964 1/	74.4	58.7	53.0	21.4	15.7	5.7	71
	Evaporated Milk						
	Average retail price per 14½-ounce can	Wholesale price per 14½-ounce can 2/	Farm value of equivalent quantity of milk	Farm-retail spread: Total	Farm-retail spread: Wholesale-retail	Farm-retail spread: Farm-wholesale	Farmer's share
1954	13.4	11.6	6.0	7.4	1.8	5.6	45
1955	13.3	11.6	6.0	7.3	1.7	5.6	45
1956	13.5	12.1	6.2	7.3	1.4	5.9	46
1957	14.1	12.6	6.2	7.9	1.5	6.4	44
1958	14.6	12.8	6.1	8.5	1.8	6.7	42
1959	14.7	12.9	6.2	8.5	1.8	6.7	42
1960	15.2	13.2	6.3	8.9	2.0	6.9	41
1961	15.4	13.1	6.5	8.9	2.3	6.6	42
1962	15.1	12.7	6.2	8.9	2.4	6.5	41
1963	14.9	12.5	6.2	8.7	2.4	6.3	42
1964 1/	14.9	12.4	6.4	8.5	2.5	6.0	43

1/ Preliminary.
2/ U.S. average manufacturers' selling price per case converted to price per 14½-ounce can.

component. Another product--usually nonfat dry milk--is made from the nonfat solids in milk. In calculating the farm value of butter, the price received by farmers for whole milk is allocated between butter and nonfat dry milk--the fat and nonfat components of milk are valued separately. This allocation is made on the basis of the wholesale prices of butter and nonfat dry milk and the costs of making and packaging them in plants manufacturing these products. During 1954-64, production and packaging costs for nonfat dry milk declined relative to those for butter. Thus, an increasing proportion of the price of milk was allocated to nonfat dry milk and less to butter. For that reason the farm value of butter made from creamery-separated milk rose less than 2 percent although the price farmers received for milk for butter increased 7 percent.

Evaporated Milk

Retail prices of evaporated milk averaged 14.9 cents per 14 1/2-ounce can in 1964, the same as in 1963. The farm value, however, increased 0.2 cent to 6.4 cents. Thus, the farm-retail spread decreased 0.2 cent. All of the decrease was in the farm-wholesale segment. The wholesale-retail segment increased 0.1 cent.

The farm value per 14 1/2 ounces of evaporated milk averaged 3 percent higher in 1962-64 than in 1954-56. The farm-retail spread averaged 19 percent larger in the later years than in earlier years, although it decreased in 1962 and 1963. The wholesale-retail segment increased by a much larger percentage than the farm-wholesale segment. Retail prices averaged 12 percent higher in 1962-64 than in 1954-56.

Consumption of evaporated milk declined from 14.8 pounds per capita in 1954 to 9.1 pounds in 1964. The decline in per capita consumption was associated with the increasing number of homes having refrigeration--especially in the South, the development of competing substitute products, and rising incomes. Increases in income and newly acquired refrigeration facilities have enabled many families to substitute fresh milk for evaporated milk, especially for infant feeding.

Ice Cream

Retail prices of ice cream, unlike those for the other principal dairy products, were lower in 1964 than in 1954 (table 10). The annual average retail price has declined each year since 1959. The farm value of the cream, milk, and sugar used in making ice cream increased slightly in 1964. During recent years it averaged about 5 percent higher than in the mid-1950's. The farm-retail spread, however, was smaller in recent years than in the earlier period. The decrease in the farm-retail spread probably resulted mainly from decreases in processing costs. Many firms have reduced costs by automation and through economies of scale. 4/

4/ Since 1954, sales of ice cream in 1/2-gallon containers have increased relative to sales in smaller containers. Also, the proportion of sales in supermarkets has increased. These developments have reduced the average price of ice cream. However, the retail prices in table 10 have been adjusted for both these developments.

Table 10.--Ice Cream: Retail price, farm value, farm-retail spread and farmer's share of retail price, 1954-1964

Year	Retail price per ½ gallon	Farm value 1/	Farm-retail spread	Farmer's share
	Cents	Cents	Cents	Percent
1954	84.3	22.8	61.5	27
1955	82.5	22.7	59.8	28
1956	82.2	23.5	58.7	29
1957	83.7	23.7	60.0	28
1958	84.4	23.2	61.2	27
1959	84.4	23.4	61.0	28
1960	83.5	24.0	59.5	29
1961	83.2	24.7	58.5	30
1962	82.5	23.7	58.8	29
1963	81.8	24.0	57.8	29
1964 2/	80.4	24.6	55.8	31

1/ For cream, milk, and sugar.
2/ Preliminary.